d.) Remarks

The instant Office Action states a rejection of claim 13 and its dependencies under §112 based a lack of antecedent basis for the term "said voltage gradient." Applicant respectfully traverses this rejection, since it appears to be predicated on a simple misunderstanding. The phrase "said voltage gradient" refers to the previous clause of claim 13, recited in lines 14-16 of the claim, which recite "at least one power signal transmitter...to establish an AC voltage gradient..." This construction provides ample antecedent basis for the phrase in question, and thus it is requested that this rejection be withdrawn. There being no rejection over the prior art of claims 13, 16, and 17, these claims should be allowed.

In the current rejection over the prior art, the primary reference is once again the Lee patent, which describes a wireless device for capturing coordinate shift information. It's relevant teaching is the use of multiple coils 20 to surround a working surface 10 and generate a magnetic field that may power a device such as a wireless mouse 100. Note however that Lee provides a matrix of conductors in Cartesian layout to receive pulses from the mouse and calculate its position by "determining the coordinate shift information based on the difference between the arrival times of the signals from the first and second paths." (col. 1, lines 64-66) This latter technique is quite distinct from the position sensing methods of the present invention, and clearly does not make use nor permit the use of spread spectrum signals for communications from the device to the system.

The Ronkka patent is cited once again in combination with Lee, apparently to show the use of spread spectrum signaling in a manner similar to the present

invention. It has no such showing. Ronkka describes a system for transferring information between a pointer and a display interface. The cited col. 5, lines 59-67 makes no mention of spread spectrum signals or any other form of signals. Rather, the citation describes the alternative use of infrared light for communication between the pointing device and the system. The statement in the rejection, "...it would have been obvious to obtain the light waves is (sic) spread spectrum signals in order to provide a lower power consumption device" is entirely without support in the reference, and, indeed, in physics or engineering. There is no explanation in the rejection of how the use of light waves somehow implies the use of spread spectrum signaling, and certainly no explanation in the reference, which specifically does not employ spread spectrum techniques. Indeed, col. 5, lines 30-32 state that, "Any method known per se can be used for the modulation, e.g. frequency modulation (FM), pulse code modulation (PCM), or quadrature phase shift keying (QPSK)." Note that spread spectrum is specifically excluded from this list. Thus the Ronkka reference fails as a relevant teaching.

If the rejection is implying that light signals are inherently a spread spectrum species, that notion is false. Spread spectrum techniques involve modulating a narrow band signal to occupy a much broader bandwidth within the signaling medium. Ronkka does not teach this concept by stating that light waves may be used for information transfer. The band broadening concept is not taught, nor implied. Moreover, light wave communications are often extremely narrow band, as in the common use of modulated laser output that may be limited to a

single wavelength. There is no reason to suppose that Ronkka implied any sort of broad bandwidth signaling.

It is noted that there is no reference to teach combining the Lee and Ronkka techniques, which are quite disparate in their respective approaches to signaling and detection. For example, note Lee, col. 4, lines 52-57: "The clock generator 74 can be used to generate a series of fixed-frequency signals, such as a series of 11.0592 MHz signals for usage downstream. The fixed-frequency signals can then be provided to an input of a counting output circuit 76 that counts the number of the clock signals and further generates basic pulse signals that are provided to the coils 20 and the synchronic determination circuit 60 along the first and second paths, respectively." Thus the Lee system requires fixed frequency signals to count the time differential along the first and second paths and calculate the position data therefrom. How could (and why would) an individual having ordinary skill in the art combine the fixed frequency requirement of Lee with a spread spectrum signaling technique?

Thus it is asserted that the rejection of claims 1-3, 5, and 18 is not justified nor reasonable, and these claims should be allowed over the art.

Another secondary reference, Katsurahira, is cited for a showing of rectifying means in a pointer device for generating operating power for active touch stimulation of a position sensing apparatus. This teaching is acknowledged. However, Katsurahira is combined with the Lee reference to reject claim 4. Given that the Lee device employs a resonant antenna arrangement with differing LC resonant combinations to indicate different button actuations, why would anyone

skilled in the art introduce a rectifying means in Lee, when it is (a) not needed, and, (b) detrimental to the functioning of the resonant circuit arrangement? Furthermore, Katsurahira is combined with Lee and Ronkka in the rejection of claim 4, and the combination of Lee and Ronkka has been shown above to be inapt and untenable. Therefore claim 4 should also be allowed.

All claims now presented are submitted in the belief that they are allowable over the art, and that this application in condition for issuance. Action toward that end is earnestly solicited.

No new fee is required by this amendment.

Respectfully Submitted,

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